

**ENHANCING ECONOMIC DEVELOPMENT BY
FOSTERING BUSINESS LINKAGES BETWEEN THE
PHARMACEUTICAL COMPANIES AND THE
TRADITIONAL MEDICINES SECTOR**

African Economic Policy Paper
Discussion Paper Number 21
June, 1998

E. C. Bbenkele
Centre for Partnerships in Enterprise Research and
Technology Transfer (CEPERTT)
University of Natal

Funded by
United States Agency for International Development
Bureau for Africa
Office of Sustainable Development
Washington, DC 20523-4600

The views and interpretations in this paper are those of the author(s)
and not necessarily of the affiliated institutions.

FOREWORD

Professor Tom McEwan
Professor Don Mead
University of Natal
Pietermaritzburg
November 1998

The six studies on Small, Medium and Micro Enterprise (SMME) Development: **1.** Enhancing Economic Development by Fostering Business Linkages between Pharmaceutical Companies and the Traditional Medicines Sector by E.C. Bbenkele, **2.** Promoting the Growth of Micro and Micro and Small Enterprises through Business Linkages in the Northern Province by C.L. Machete and F.D.K. Anim, **3.** Business Linkages Involving SMMEs with Umgeni Water and Hulett Aluminium in KwaZulu-Natal by T. McEwan, D.C. Mead and N.M. Ndlovu, **4.** Linkage Promotion in South Africa: Insights from Research Conducted in Durban and Richards Bay: An Exploratory Study by F.O. Skae, **5.** The Role of Business Linkages in Restructuring the Footwear Industry in the Greater Pietermaritzburg Metropolitan Area by B. Strydom, and **6.** Small Enterprise Growth through Business Linkages in South Africa by D.C. Mead were carried out between September 1997 and March 1998. Five of the studies were carried out in KwaZulu-Natal Province under an agreement between the University of Natal, Pietermaritzburg, the United States Agency for International Development, and Harvard University, through a sub-agreement with Michigan State University. The final study was arranged between the same American principals and the University of the North, Sovenga, Northern Province, in South Africa.

The choice of where to carry out these studies on SMME developments was not entirely accidental. The Northern Province, for example, was found to be the poorest of South Africa's nine provinces in the 1996 census with an average income of R17,900 (approximately US\$3,000) and 46 percent of its 4.9 million population unemployed, which is the second highest after Eastern Cape (49 percent) in South Africa.

Third in terms of high unemployment (with 39 percent), was KwaZulu-Natal Province, which has the largest population (8.4 million) of South Africa's 40.8 million population. The average income is barely R24,3000 (approximately US\$4,200), despite the large contribution made by the Durban Greater Metropolitan Area to the South African and Provincial economies. Because the principal source of investment in the past has come from South Africa's white population, large disparities still exist which distort average income calculations, according to the 1996 census. Among unemployed Africans, for example, the average income for women is R12,000 and R16,000 for men. This compares with an annual income for men of R30,000 and R20,000 for women across the whole working population in South Africa.

There are also daunting development backlogs in both provinces. For example, nearly one million people in KwaZulu-Natal have received no formal education, and a further 700,000 are classified as "functionally illiterate". A further half a million households live in traditional housing with no direct access to electricity or potable water supplies. (The Sunday Times Report, 25 October 1998, p.5). The Income Distribution for the province (Gini Coefficient) is 0.7 which indicates the same skewness as for the rest of South Africa, compared with an ideal coefficient zero. However, the

Human Development Index for the province, which measures life expectancy, income and literacy rate, etc., was 0.59 when data was last collected in 1991, compared with 0.69 for the rest of South Africa and an ideal index of 1. (Source: Industrial Development Report on the Pietermaritzburg Spatial Development Initiative, 1997).

Northern Province is the least urbanized province in South Africa and 90 percent of its population still live in traditional housing or shacks in the rural areas on the outskirts of towns. It also has the highest proportion of women (54 percent of the population) compared with 52 percent across South Africa. The highest population of uneducated or “functionally illiterate” people live in this province, and over 60 percent of households still use wood for cooking and heating purposes.

As if high unemployment, illiteracy and restricted rural development are not burdens enough for any province to have to carry in the New South Africa, KwaZulu-Natal and Northern Province have also still to come to terms with the added problems of HIV/AIDS and, in the case of KwaZulu-Natal, politically-motivated crime and violence.

Accurate data on HIV/AIDS infection is hard to come by, notwithstanding the commendable efforts of specialists and other experts in the field, because the full extent of the problem only attracted full media attention in South Africa earlier this year when the Deputy-President, Thabo Mbeki, made an eloquent plea for more sympathetic understanding of those infected, and also called for rapid action plans to contain the spread of this pandemic. If forecasts are accepted, they make chilling reading as 53 percent of the beds in the University of Natal’s Medical School hospital are already occupied by HIV/AIDS patients. Over one in four people in KwaZulu-Natal is probably HIV/AIDS positive and, nationally, South Africa is already planning to cope with an estimated two million orphans, or abandoned children, as well as one-third of all women attending ante-natal clinic being infected with HIV/AIDS, over the next 10-15 years.

It would be out of place to comment much further here about a subject of which we possess no expertise. Two things which are relevant to the SMME studies need to be stated. Firstly, a major consequence of South Africa’s economic and political history up to 1994 was the gradual decline of the “Lobola” system, whereby families were started before the African version of Western “marriage” took place. Women remained in rural areas with their families to raise new off-spring, whereas the men left to find work in urban/industrial areas so that they could raise the money to pay off the “Lobola” dowry to the woman’s parents and support their families. Since then, the 1996 Census reveals that the migration of men to rural areas has become a permanent feature of the South African economy. For example, 63 percent of African males under the age of 20 live in rural areas but this figure declines to only 40 percent by the age of 30. This trend begins to reverse itself after the age of 55, with almost 70 percent of males returning to their rural homelands by the age of 70 years.

Secondly, in view of this cycle of male migration, the prominence given to SMME development in the South African economy is easily justifiable since, although African women are also becoming more urbanized, this occurs at the lower rate. For example, 63 percent of African women are born in rural areas yet almost three-quarters remain at home throughout the most economically active period of their working lives. Raising the living standards of African women and their children through SMME development is an obvious way of combating HIV/AIDS in rural and urban

communities since less migration and greater discrimination against African women, in terms of equal pay and job opportunities, means that over 50 percent are unemployed, compared with a national average of less than 30 percent. Starting up SMMEs is even less common and, in the six studies performed we experienced great difficulty in finding more than a few SMMEs in KwaZulu-Natal which were owned and run by women.

Politically-motivated crime and violence have also retarded economic development in South Africa and nowhere more so than in KwaZulu-Natal. Recent statistics indicate that more people have been killed in KwaZulu-Natal since 1994 than in the whole of the former Yugoslavia (SABC News Report, 3 November, 1998). Again, the reasons are far too complicated for detailed discussion in this report. However, that the Zulu nation is the largest ethnic group in South Africa, yet has failed to secure what might be regarded as an equitable share of political and economic power, because of divided support for the two largest political parties, provides part of the explanation why political-motivated crime and violence has brought economic development (eg. tourism) almost to a halt in some regions of KwaZulu-Natal. It also reinforces the argument for learning more about SMME development in the expectation that, if ever political differences can be reconciled, then the expansion of appropriate economic activity among African people in particular should proceed far more rapidly in KwaZulu-Natal.

This research project attempts to explore the business interests of two very different sets of South Africans. On the one hand, there are the senior and middle managers employed by two well-known, undoubtedly successful organizations in Pietermaritzburg. Mostly, but not solely white, these represent the buyers and include well-informed managers, trained in modern business practices, who see their primary functions as raising productivity and expanding their markets in ways which will eventually benefit all of the expanding population of the Greater Pietermaritzburg Metropolitan Area. As part of how they go about achieving these aims, the managers of both companies are committed to purchasing goods and services from Small, Medium and Micro Enterprises (SMMEs) amongst the historically disadvantaged Zulu Community in particular.

On the other hand, the “sellers” in the list of companies provided by “buyers” included a mixture of successful white-owned SMMEs alongside a wider range, in terms of financial performance, of entrepreneurs from the Zulu Community. In passing, it should be noted that Indian SMMEs were deliberately excluded because these were already being studied in a separate survey. The Zulu entrepreneurs could be divided into a small portion of successful medium-sized enterprises, as defined by the South African Department of Trade and Industry (DTI), which are clearly well-run and trade regularly with the largest companies in KwaZulu-Natal without need of any assistance from third parties, including government agencies.

Outside of this small apex of successful, largely self-made, black enterprises lies a large phalanx of Zulu-run SMMEs which are owned and operated by up to three, but mostly one, individual. Of the original list of over 1,200 SMMEs provided by both corporates, more than 80 were invited to participate in view of the limited time available. Of these, over one-third finally took part in the survey.

The research questions we sought to answer were based on the premise that around the world, modern, forward-looking businesses interact with other enterprises through a complex web of

commercial relationships. This is because many efficient managers find it cost-effective not to try to do everything themselves “in-house”. Instead, they purchase some of the goods and services they require for their production activities from other enterprises that specialize in particular aspects of the production process. These purchases and sales, which we refer to as business linkages, are a pervasive characteristic of efficient and productive economies.

South Africa is expanding the scope of these commercial transactions. Many large corporations are moving toward a lower degree of vertical integration; many are reaching out more beyond their traditional corporate patterns, sometimes to smaller suppliers. While there is a long tradition of support for small business in South Africa, much of the energy in the past has been devoted to the promotion of small, white-owned businesses. In recent years, there has been considerable discussion of the way in which that process can be opened up to newly-established enterprises that had been excluded under the old Apartheid regime.

A research project at the University of Natal and the University of the North, in cooperation with Michigan State University, funded by the US Agency for International Development, set to examine the nature of these business linkages, as well as the extent to which they currently provide opportunities for improvement for historically disadvantaged small enterprises, and the kinds of steps that can be taken to expand such opportunities in the future.

In the first of these studies, Professor Bbenkele set out to identify existing and potential business linkages between the traditional medicines sector and registered pharmaceutical companies in South Africa. He also investigated how these business transactions could be developed to create an estimated 1,000 jobs per year in Durban, plus a smaller number of job opportunities in Pietermaritzburg.

His findings indicate that it cannot be assumed that expansion of the traditional medicine sector is straight-forward or a foregone conclusion, as different types of business linkages in an increasingly complex chain or network first need to be explored. These linkages involve gatherers, traditional healers, local authorities, National Parks Boards, pharmaceutical companies, the South African Medical Control Council and Ministry of Health, as well as health authorities overseas. All would need to be consulted further before the potential growth in job creation can be achieved. Job creation of this magnitude is of importance not just because it would help to reduce the high unemployment in the two Metropolitan Areas, but also because many of these envisaged new jobs would be taken up by rural women as gatherers of traditional medicine ingredients in the raw material form.

In the second study, Charles Machete and Francis Anim studied business linkages between small suppliers, in mainly black-owned businesses, and large buyers, in mainly white-owned businesses, and attempted to evaluate their contributions to SMME development in The Northern Province by seeking answers to the following questions: What are the distinguishing characteristics of small suppliers with, and without, business linkages? What are the determinants of business linkages? How can knowledge of these factors promote and strengthen new and existing business linkages? What are the constraints on the establishment of business linkages. Finally, what measures need to be taken to promote successful business linkages in The Northern Province?

In the third study, two interview teams led by professors McEwan and Mead identified existing and potential business linkages by carrying out a detailed study of 29 SMMEs which supply two leading corporates in Pietermaritzburg. These corporates were selected because of their public commitment to assisting historically disadvantaged enterprises, which predates the creation of the “New South Africa” in 1994, but also because the policy of both corporates is directly influenced by national and regional government agencies which seek to act in a beneficial or interventionist manner.

In-depth interviews were carried out with entrepreneurs and managers using a standard survey instrument, which preceded a comprehensive study of the values, objectives, strategic behaviors and the problems encountered by both suppliers and buyers, most of whom were situated in the Natal Midlands along the Durban-Pietermaritzburg corridor of the proposed Eastern Seaboard Spatial Development Initiative project. This study is far from exhaustive and much more needs to be known about other contributing factors affecting the vital task of enabling larger numbers of historically disadvantaged people to participate in business activity in the Natal Midland and play a fuller part in expanding the South African economy.

In the fourth study, Owen Skae studied the existing and potential business linkages of 32 SMME suppliers located in the Durban and Richards Bay Metropolitan Areas and their business linkages with 15 other companies, which are large buyers in the same Eastern Seaboard “corridor”.

These suppliers may be regarded as representative of the wide range of SMME activity in both coastal industrial centres, since no fewer than 26 different manufacturing and service sector enterprises have been included in this survey. In-depth interviews were carried out with entrepreneurs and managers using the same standard survey instrument used in the previously-mentioned study, which resulted in a comprehensive analysis of the motivations, aims, strategies, outcomes, and difficulties experienced by both suppliers and buyers. More still needs to be known about how to enable increasing number of historically disadvantaged people to participate in business activity in this region of KwaZulu-Natal, thereby helping to expand the South African economy, but a valuable start has been made in this research project.

In the fifth study, Barry Strydom carried out a detailed analysis of existing and potential business linkages of 32 SMME’s and larger companies which make up the declining footwear industry, mostly based in the greater Pietermaritzburg Metropolitan Area. These enterprises either purchase from or supply other companies both in and outside South Africa.

The reasons for the steady decline of the South African footwear industry are complex and probably came to public attention for the first time as a result of the lifting of tariffs following South Africa’s readmission to the Global Economy in 1994. However, international isolation, the failure to introduce new technology in the past, inadequate training, low productivity, coupled with a genuine concern by the industry to avoid shedding manual jobs carried out by historically disadvantaged people, have all contributed to this loss of market share. More than 4,000 jobs were lost in the Greater Pietermaritzburg Metropolitan Area alone, between 1994-1998, and the situation is likely to deteriorate further as the industry braces itself for the full impact of further cuts in tariffs under the GATT Agreement which are due in 1999. However, many local SMME’s and larger companies have shown themselves to be both adaptive and resilient in the face of unavoidable change, and this study succeeds in identifying key forward, backward and horizontal linkages which will have to be

evaluated and probably implemented during the next 18 month, if the South African footwear industry is to survive intact into the 21st century.

Special thanks are due to Professor Donald C. Mead, Michigan State University, for helping negotiate these last-minute arrangements; and also for sharing some of the interview load undertaken by Barry Strydom, with further assistance by Professor Tom McEwan. It should be noted that the six papers are a part of an ongoing study, and some analysis has been excluded because it forms part of a Masters dissertation, which has still to be assessed. Since completing this study, however, members of USAID/EAGER team have been invited to carry out an evaluation of the government-backed Workplace Challenge initiative, which will explore ways of improving collective bargaining and introducing new technology into the local footwear industry. A further report on this research is planned for 1999.

In the final study, Professor Mead undertook the task of drawing the disparate research findings together into a coherent whole which will hopefully be useful to all stakeholders with an interest in the successful expansion of the SMME sector in South Africa. Attention should be drawn to the following synopsis of his findings which would seem to have a wider range of application in South Africa outside the provinces of KwaZulu-Natal and the Northern Province.

The research shows that buyers establish business linkages with three principal motivations in mind; namely, either because it is good business to do so; or out of a sense of community service, or because they wish to shift to a production pattern that enables them to escape payment of taxes, or evade the impact of rules and regulations, usually imposed by Government agencies. While the last of these motivations was clearly true in many cases, a number of other suppliers paid all relevant taxes and fees while employing workers who were members of unions and were covered by the standard labor benefits. These enterprises were generally the most efficient of the small suppliers, and the ones that were growing the most rapidly.

Some linkage contracts were much more helpful than others to historically disadvantaged small suppliers. The key determining factors of these arrangements were the characteristics of the contract (size, period covered, stability), and the degree to which the contract provided a channel for the supplier to learn how to do things better. Where the motivation for the contract was based on community service, these factors were much less likely to be present. In such cases, linkages generally resulted in frustrations for the buyer and little development impact for the supplier. In contrast, where the motivation was commercial, the buyer had an incentive to serve as mentor to suppliers, for example by helping them improve their efficiency and productivity. Unfortunately, our interviews uncovered relatively few cases where the buyers played a significant role in mentoring their suppliers in either KwaZulu-Natal or the Northern Province.

Since there is considerable interest on the part of both buyers and suppliers in expanding the involvement of historically disadvantaged small enterprises in business linkages, with several initiatives currently under way and others just starting, it is clear from our research that to be most effective, institutional support for the promotion of business linkages needs to be based on a number of clear principles:

Firstly, the driving force must be economic, not a paternalistic goal of community service. All linkage promotion activities must have an orientation that starts from markets and works back to suppliers, thereby helping them take advantage of these identified market opportunities.

Secondly, the institutional structure must be cost-effective, taking account of the limited resources available to support this type of activity. Specialization and focus among promotion agencies can be important in helping achieve this objective. Buyer mentoring, a key factor in many successful linkages, also contributes in important ways to the goal of cost-effectiveness.

Thirdly, there are three specific building blocks which support the promotion of linkages; namely, information, capacity-building, and capital. While each may be needed to bring a particular contract to successful fruition, in general, one organization should not attempt to supply all three because the risk of inefficiency increases.

Fourthly, issues of imbalance between buyers and sellers are important and must be addressed in establishing equitable policies or programmes for linkage promotion, and some of these approaches are discussed in the papers.

Fifthly, much has already been achieved in the expansion of business linkages involving historically disadvantaged small enterprises in South Africa, thanks to the efforts of Ntsike Enterprise Promotion, the Centre for Small Business Promotion and the National Small Business Council. The interviews we carried out make clear that there is a strong will on all sides to do more. With stronger institutional support, there is much more that can be done.

It would be impossible to express thanks to the large number of people who either assisted or participated in this project, but special mention must be made of the contribution of Professor David Maughan Brown, Senior Deputy Vice Chancellor at the University of Natal, who supported the research programme from the start and made it much easier to implement. Mr. Hollie Clarkson and Mrs. Cheryl Pratt from the University Finance Department have to be thanked for their professional monitoring of expenditure which ensured that compliance with rigorous US funding regulations was achieved.

Charmagne Howe, Kathy Acutt, Joy Gauche and Debbie Bowen, from the Department of Business Administration, must also be thanked for their administrative support, without which many interviews would never have been arranged and the two large workshops in Pietermaritzburg would certainly never have run so smoothly. Special mention must also be made of Nhlanhla Moses Ndlovu, who proved to be an outstanding research assistant, and provided invaluable support in "breaking the ice" during interviews with Zulu-speaking respondent, and who stored and analyzed data in an accurate way which augurs well for his own future research into SMME developments. We must also express our gratitude to Professor Anthony Lumby, Dean of the Faculty of Economics and Management at the University of Natal Durban Campus, for supporting Owen Skae's study of emerging SMME activity in the Durban-Richards Bay region of KwaZulu-Natal province; and additional thanks are due to Mel Clarke, KwaZulu-Natal Regional Economic Forum, for "opening doors" which resulted in us gaining quick access to the key players in the local footwear industry. Finally, the patience, helpful advice and insights of Alwyn Pollock, Commercial Manager at Umgeni Water, and his assistant Jill McEwen and Dennis Ndlovu, were much appreciated, along with those

of Mervyn Webb, Senior Purchasing Manager at Hulett Aluminium, as was the interest shown by Andrew Layman, Director of the Pietermaritzburg Chamber of Commerce and Industry, and the coverage provided by Johan Beukes, Business Editor of the Natal Witness, South Africa's oldest daily newspaper.

Special thanks must also be expressed to the various English- and Zulu-speaking entrepreneurs who took part in the various surveys. They ranged from the obviously successful to those who run their fragile businesses on tightly-stretched shoe stings in back gardens, on in houses converted into make-shift workshops, with small children at play in the room next door. Here, in the townships or on run-down industrial estates, we interviewed mostly male respondents, many of whom possessed little knowledge of basic business skills and practices, which are essential in order to survive.

Their dire situation raises fundamental questions about the nature of the "Transformation" process in the New South African civic society. Simply put, in our view, if whatever has been inherited by the more fortunate, as either wealth, health, education, or even as better career opportunities, was at the expense of the near-defeated in society, then natural justice insists that better ways must be found of helping these brave, anxious, inadequately-trained "survivalist" entrepreneurs to place their tiny businesses on a sounder economic footing in the future. Otherwise, for them, "Transformation" and "Redistribution" will become two long, meaningless words in South African newspapers and dictionaries, which some are unable to read and most are unable to purchase.

Ever optimistic, some of these respondents asked if they could see our final reports, and it is with this commitment in mind that most of the following studies have been compiled with the minimum number of tables, diagrams and calculations which, for reasons outside their control, most said they might not be able to understand. We hope that better ways of assisting these people to run their small enterprises more effectively occur as a result of the publication of our reports which indicate that their business aims are simple enough and, not surprisingly, very similar. They wish to raise their living standards more rapidly by dint of their own efforts, enjoy better health, educate their children beyond the basic standards they achieved, and take their rightful place in a civic society of which they and all other South Africans can feel justifiably proud.

ABSTRACT

This study examines a wide range of issues surrounding business linkages in the traditional medicine sector of South Africa. Utilizing qualitative data collected through unstructured interviews and two focus meetings of groups of traditional healers and gatherers, the study describes the existing division of labour in the gathering, marketing and preparation of traditional medicines. The traditional linkages between gatherers and healers are described alongside the new and growing linkages between gatherers and large pharmaceutical companies. Backward linkages that involve the cultivation of medicinal plants are becoming commonplace as are forward linkages, under which the pharmaceutical companies use black representatives and traditional healers in the marketing of their products.

Along with its description of existing linkages, the study discusses impending changes in such factors as the physical environment, regulations and market incentives. These factors include: the problem of increasing scarcity due to over-harvesting and deforestation; potential changes in South Africa's health product marketing policies due to the new National Drug Policy; and, the lack of protection for intellectual property rights of traditional healers and gatherers of traditional medicines. A number of policy recommendations are made, aimed at ensuring sustainable growth in the sector, including: the establishment of a sector-wide association of gatherers and traditional healers; encouragement of the cultivation of traditional medicinal plants; a commitment on the part of pharmaceutical companies to test and produce useful traditional medicines; and support from local business centres for gatherers and traditional healers as small business persons.

Author:

Edwin Kachesa Bbenkele [bbenkelee@outs.unp.ac.za] was formerly Associate Professor in Marketing in the Department of Business Administration, School of Business, at the University of Natal, Pietermaritzburg. He is currently Director of the Ford Foundation-funded Centre for Partnerships in Enterprise Research and Technology Transfer (CEPERTT), which is jointly located in the University of Natal Department of Business Administration, School of Business, Pietermaritzburg, and Natal Technikon, Durban, South Africa.

Author's Note:

This study of a little-known part of the South African economy would not have been possible without the award from the US Agency for International Development, through their project, Equity and Growth through Economic Research in Africa: Public Strategies for Growth with Equity (EAGER/PSGE). In extending thanks to them for their generosity, we must also express gratitude to Professor Donald C. Mead of Michigan State University for his outstanding contribution in helping to arrange for the award in the United States, and for liaising with staff at the University of Natal, to ensure that all the USAID/EAGER requirements were met and for his hard work and enthusiasm in organising and conducting research as Visiting Professor in the Department of Business Administration between October 1997 and March 1998.

TABLE OF CONTENTS

	<i>Page</i>
1. INTRODUCTION	1
2. NATURE OF THE PROBLEM	1
2.1 Problem of depletion of indigenous forests and flora	2
2.2 Marginalization of actors in the traditional medicines sector	2
3. METHODOLOGY	3
4. RESULTS	4
4.1 The participants in the traditional medicines marketing system	4
4.1.1 Functions performed in the marketing system	4
4.1.2 The traditional medicinal plant gatherers, <i>izinyanga</i> and <i>sangomas</i>	5
4.1.3 The pharmaceutical companies producing traditional medicines ...	7
4.1.4 The customers of traditional medicines and medicinal plants and herbs	7
4.2 Existing linkages Identified	8
4.2.1 Traditional medicinal plants supplied to pharmaceutical companies and <i>izinyanga</i>	8
4.2.2 Growing the traditional medicines and herbs	9
4.2.3 Traditional medicines as a non-traditional export product	10
4.2.4 Forward market linkages	10
5. DISCUSSION OF RESULTS	11
5.1 The driving force behind the business linkages	11
5.2. Constraints on the potential of the business linkages for contributing to economic development	12
5.2.1 Regulatory requirements from the Medical Control Council	12
5.2.2 Intellectual property rights issue	12
5.2.3 Expectations of the traditional healers and gatherers from the pharmaceutical companies	13
6. NECESSARY INSTITUTIONAL ARRANGEMENTS TO PROMOTE GOOD BUSINESS LINKAGES (POLICY IMPLICATIONS)	14
6.1 A unified group of gatherers and traditional healers	14
6.2 Land for growing traditional medicines	15
6.3 Roles of different institutions in the transfer of technology in the growing of plants	15
6.4 The role of the pharmaceutical companies	15
6.5 Roles of the local business support centres	16
6.6 Government policies	16
7. CONCLUSION	16

1. INTRODUCTION

This study on business linkages in the traditional medicine sector is part of the USAID/EAGER project which investigated the contribution of business linkages to the growth of productive employment among micro and small enterprises in South Africa. The author identified the gatherers of traditional medicinal plants and herbs as a group which if linked to the pharmaceutical companies (which manufacture traditional medicines) could result in an improvement of the quality of life of the gatherers and other actors and ultimately contribute to employment generation and increase the supply base of the medicinal plants and herbs. The various types of linkages are identified, relationships and roles of the various actors are discussed and the things to be done to ensure that linkages take place are suggested.

Traditional medicine is usually identified as one of the philosophies of medicine alongside the other alternative medicines. In this regard, the Department of Health is currently working on the National Drug Policy¹ in which it openly calls on the traditional healers to work closely with the formal health sector but without making them part of the sector. How realistic this is will be a matter to be considered by the traditional healers. The draft document further suggests that once the traditional healers enter the formal medical sector, they will have to be closely monitored on efficacy, safety and quality with the ultimate aim of registering them. These gestures and policy frameworks are being made without considering the views of the traditional healers and the other actors.

What is even more worrying is that the National Drug Policy is not very clear on how the Ministry will accept the traditional healers, and yet not make them part of the sector. This study, to the contrary, aims at showing how this neglected sector can be brought into the mainstream of economic activities and how it can significantly contribute to job creation by linking it with the big pharmaceutical companies.

These issues are presented and critically examined in the current study. Hence this paper will discuss the nature of the problem which is being investigated and the methodology used to collect the information, and outline the different types of linkages which exist or could be fostered, the rationale for the linkages and the problems, the necessary institutional arrangements for the linkages to work and the policy implications for effective implementation.

2. NATURE OF THE PROBLEM

In order for the traditional medicines sector to live up to the challenge of being an active participant in the health sector, a number of issues will have to be carefully considered and these serve as the initial problems to be solved, without which, to get their active and beneficial involvement would be mere rhetoric. The issues which should be addressed are as follows:

¹ From draft documents from the Ministry of Health, Medical Control Council.

2.1 Problem of depletion of indigenous forests and flora

In the initial study conducted by the Institute of Natural Resources in collaboration with the researcher, the main problem was to identify ways of reducing rapid deforestation of the indigenous forests and flora in South Africa. In this study a few traditional plants were not found on the market. A question was raised as to whether these medicines were merely not in season or whether they were extinct. It is a well-documented fact that certain plants are extinct and are not available any more in the forests of most of the countries in Central and Southern Africa.

This problem has been caused by irresponsible harvesting of the plants where shrubs are pulled out, roots all dug out, trees debarked etc. In two markets in Durban, Mander (1996) found that a total of 490 to 730 tonnes of materials (tubers, leaves, bark etc.) were sold in the market in a year. It is clear that the amount of materials passing through the traditional medicine markets in South Africa is very high. Extinction of the precious indigenous plant species is quickly creeping in and if this not reversed, it will cause economic and social problems to the people who depend on the traditional plants and flora.

Further, with the high level of migration from the rural into the urban areas, this figure is bound to increase as 80% of the black population in South Africa consult a traditional healer either before or after consulting a Western doctor². This point suggests that there will be an increased demand for traditional plants in the urban areas. As expressed by a traditional healer in Johannesburg, such a condition allows the street medicines gatherers to make money from their limited knowledge. The role of the traditional healers differs from this; it is to provide health. Therefore as the demand for traditional plants and herbs remains high, there will be a corresponding increase in deforestation. In addition, it was alleged by the traditional healers that it is the gatherers and not the traditional healers who are irresponsible in the harvesting of the medicinal plants. The study by Mander (1996) confirms this allegation when it points out that the gatherers were aware of the deforestation taking place caused by irresponsible harvesting methods.

This finding should be seen in the correct perspective, as groups of gatherers are also receiving instructions on the best methods of harvesting traditional medicinal plants. In fact, other areas responsible for deforestation have been identified as crafts, hut building, overgrazing, commercial sugar plantations etc. (Cunningham, 1988).

2.2 Marginalization of actors in the traditional medicines sector

Currently, there seems to be a lot of interest in traditional medicines by researchers. This interest includes a concern as to how equitable the relationships will be between the pharmaceutical companies, who produce the traditional medicines, and the unsophisticated "gatherers" and traditional healers (the main actors in the sector). The fear which exists is that the allopathic or Western medical

² According to *Personality*, 29th May, 1994. (*Personality* is a popular South African magazine.)

practitioners will exploit the knowledge to their advantage. For fear of such exploitation,³ which could lead to marginalization, knowledge of the various traditional medicines could well be withheld.

Examples exist where traditional healers have provided their know-how to pharmaceutical companies, and then products were manufactured with no monetary or other benefits being passed on to the originators⁴. As a result of this, not many traditional medicine practitioners and gatherers will be prepared to share their knowledge as they feel they are being exploited. This aspect needs close attention as the issue of intellectual property rights has caused problems and is discussed later.

The immediate question which arises is how best the sector could operate effectively and for the actors to participate fully in the formal monetary economy by being linked to better market opportunities. This is necessary if any significant contributions to employment generation will be realized. Of course, this will ultimately depend on the willingness of the pharmaceutical companies to operate in a dyadic relationship with the traditional healers and the gatherers of traditional plants.

Furthermore, the apparent power and role conflict between the traditional healers and the gatherers in which the traditional healers consider themselves as the masters of the knowledge in traditional medicine and also see themselves as active gatherers of these medicines, has to be addressed. If this is ignored, a few people (traditional healers) would want to do everything, thereby frustrating the role of gatherers who are significant actors or business people of interest in this study.

3. METHODOLOGY

Data for the study was collected using unstructured interviews, with a questionnaire as a guide. As the traditional medicine sector consists of survivalists, most of the questions in the supplier business linkage questionnaire were not appropriate. Similarly, unstructured in-depth interviews were conducted in the ten companies and organizations at work in the sector. These included big and medium-sized companies and various government agents.

In addition to unstructured in-depth interviews, two focus group interviews were held. The first interview brought together twenty traditional healers in Gauteng. The second one held, in Groutville, KwaZulu-Natal, consisted of thirty-six traditional healers representing all the nine provinces in the country. The study conducted by Mander (1996) was also extensively used as the author was a member of the project team.

Hence the data collected were qualitative and no attempts at a quantitative analysis have been made.

³The Focus Group in Johannesburg (Feb. 1998) clearly gave examples of cases of exploitation.

⁴From the focus group interviews held with the Traditional Healers in Johannesburg, South Africa.

4. RESULTS

4.1 The participants in the traditional medicines marketing system

A marketing system is defined as a set of interdependent institutions which serve to move products and services from the point of production to the point of sale. At present the marketing system in the traditional medicines sector is fragmented and consists of supplier/gatherers of medicinal plants, manufacturers (pharmaceutical companies, gatherers) and customers consisting of *izinyanga*, patients, *muthi* shops, wholesalers etc. It is therefore important to explain the nature of these institutions so that effective suggestions on how they should interact can be made. This will be done in the latter sections but in the present section the various functions performed by members will be described and a general description given of the main actors in the marketing system.

4.1.1 Functions performed in the marketing system

The first function is the source of supply of traditional medicine. Traditional medicinal plants grow in forests and are harvested mainly by gatherers (and at times by traditional healers). However, due to commercial sugar plantations, overgrazing etc., it is becoming difficult to source most traditional medicinal plants. In an overview of the failure of traditional methods of forest conservation (Bbenkele 1997), the author points out that the few gardens which were established to supply traditional medicinal plants failed as the gatherers and traditional healers did not see any sense in buying from these places while the same plants and herbs were abundantly available in the forests and free. With the rapid extinction of most of the popular medicines, there is a need for growing traditional medicinal plants as an alternative source of supply.

Processing of the traditional medicinal plants and herbs is the second function in the marketing system. This involves preparing the raw materials in a form for them to be put on the market for sale or for prescription to customers. The traditional medicinal plants and herbs are cut into small pieces, dried and if necessary ground into powder. The gatherers usually do this on the streets as they sell. The traditional healers who are also involved in gathering employ about five young boys and girls to process the plants and herbs for them.

The pharmaceutical companies who produce traditional medicines are also involved in processing and packaging/bottling of the medicines. For example in the manufacturing of “Blood Mixture“, an extraction process is used, and appropriate concentrations made for efficacy and mixed with preservatives for long-shelf life.

The third function is marketing of the traditional medicinal plants and herbs and the processed medicines. Once the plants have been processed, the gatherers sell these to the customers (*muthi* shops, patients, *sangomas*, *izinyanga*). The processed medicines from the pharmaceutical companies finds their way to the market through traditional marketing channels.

Diagnosing and giving prescriptions is the fourth function which is performed in the marketing system. This involves divining and giving prescriptions for certain problems or ailments. In varying degrees this is done by the *sangomas* and mainly by the *izinyanga*. The differences and similarities of these two are discussed in the next section.

For the marketing system to benefit the gatherers as a group of particular interest in this study, it will be important to have some specialisation where the different actors concentrate on the things they know or can do better or to pass on certain tasks to others to perform. Whether this cooperation can exist is something which needs to be further explored.

4.1.2 The traditional medicinal plant gatherers, *izinyanga* and *sangomas*

The gatherers of the traditional medicines in the study conducted in two markets in Durban (Ezimbuzini and Russell Street) were described as follows:

Table 1: Summarized gatherer profile

	Ezimbuzini	Russell Street
Gender	Females 89% Males 11%	Females 79% Males 21%
Age	Range 24-89 Mean 44	Range 18-104! Mean 45
Educational Level	No schooling 68% Junior school 32%	No schooling 52% Junior school 44%

Source: Mander (1996)

Table 1 describes the medicinal plant gatherers as women in their middle age, with low education and making less than R200 to slightly above R2000 per month. This group can best be described as survivalists. However, the Durban study assumed that the gatherers were not traditional healers. In fact, it was hypothesized that the traditional healers would be the main customers in the two street markets. To the contrary, the study in Gauteng found that the traditional healers also gather medicinal plants and the traditional healers there made a very strong point that the street *muthi* traders, also known as the gatherers, have very limited knowledge of the traditional medicines and are only interested in making money, as opposed to contributing to the health of the patients.

These allegations have to be understood by contrasting the traditional and the contemporary roles of the *izinyanga*, *sangomas* and gatherers. Traditionally, a *sangoma* was a visionary and a diviner and would often consult with an *inyanga* on the medicine to be used. *Izinyanga* were both diviners and experts on medicines. They tended to occupy a very high level in society and passed on small tasks of medicine-gathering to their assistants (gatherers). It was believed that gathering was too low for the status of the “master of medicine”, the *inyanga*. The gatherers were shown where to collect the

medicine by the *sangomas* and *izinyanga*. However, nowadays the distinction is becoming more blurred as actors are driven more by commercial reasons.

Notwithstanding the above, one point is clear, namely that both traditional healers (a few of those in rural areas) and gatherers are involved in the gathering of medicinal plants. The only difference is in how they use the raw materials. The traditional gatherers on the one hand use them to prepare medicine for the patients whilst on the other hand the gatherers sell them to patients to fill the prescriptions from traditional healers and Izangoma. These roles are consistent with what is described by most authors. However, attention should be paid to when the articles were written.

In the first instance and according to Calloway (1870), a *sangoma* was understood to be a doctor of divination. Various he or she was called *isanusi*, or *ibuda*, *inyanga* and/or *umungoma*. A *sangoma* was described as a traditional healer or diviner who employs music, dance, and the throwing of bones to discover evil and diagnose disease. This definition, as can be seen, identified the *sangoma* as being an *inyanga*.

However, the *Weekly Mail* gives a very clear separation of *sangomas*, *izinyanga*, herbalists and others, but does not describe their various responsibilities (*Weekly Mail*, 1988). Hammond-Tooke (1962), in his attempts to describe the functions of the *sangomas* and other actors, added more confusion by stating that “a distinction should be drawn between the herbalist (*inyanga*) and the witchdoctor proper (*isangoma*), sometimes called a diviner, who communes with the ancestral spirits (*amathongo*).

This respectful definition is in line with that given by Longmore (1959) when he describes an *inyanga* as “... [one who] must diagnose and prescribe remedies for ordinary ailments and diseases, prevent or alleviate misfortune, bring prosperity and good luck, and provide protection against bad luck, accidents and witchcraft.” Other more demeaning and sceptical roles are described by others such as Garden (1852)⁵. This suggests unclear roles of the various actors in society, which seems to be very obvious in literature.

It would appear that the separation of roles is there but is blurred. However, in this study, the *sangomas* are diviners and mostly women; *izinyanga* are the healers and mostly men; and the gatherers are collectors of medicinal plants and herbs and are mostly women. This would seem to be in line with the findings of Mander (1996).

This paper posits that these gatherers could be assisted to do bigger and better business by teaching them how to grow the traditional medicinal plants and linking them to bigger and high value-added market opportunities.

4.1.3 The pharmaceutical companies producing traditional medicines

As pointed out above, for their traditional medicines range, the pharmaceutical firms buy traditional medicinal plants and herbs from the gatherers. Once received, the raw materials are stored to preserve their potency. An extraction process is used to get the desired chemical components from the plants

⁵ Readers interested in pursuing the distinctions further are advised to refer to the work of Gardner (1852).

and these are further processed to provide the appropriate concentrations. Finally, the medicine is either bottled or made into tablets. These are packaged and put in the warehouse ready for dispatch to wholesalers, retailers and individual sales agents (as in the case of Impilo Drug Company).

As an example of the various product lines, Marshall Chemicals in Johannesburg at present produces a wide range of traditional medicines and the other product lines include cosmetics and registered medicines. For example, the company produces a total of sixty-nine products in the *muthi* range alone. In addition to this, there are thirty-one product items in the Marshall range, twenty-one in the Du Toit medicines, six in the "77" range, nine in the general, six ointments, five in the children's range and four tablet medicines⁶. There are a few others which manufacture products relating to "love." GM Pharmaceutical also produces a very wide range of love syrups, pills and capsules mostly aimed at increasing sexual potency or pleasure and complements this by selling condoms made by another company.

For these companies, there seems to be a need for both backward and forward linkages, i.e., sourcing of raw materials used in the production process and ensuring that a large number of consumers for the traditional medicines is reached. This opens up potential opportunities for involving the gatherers, *izinyanga* and the *sangomas* at appropriate levels in the supply chain. As long as members of the supply chain or the marketing system act in a responsible manner by allowing all members to freely perform their specialized activities and passing the benefits to other members in the supply chain, there is a real possibility of making the gatherers and the other actors active participants in the pharmaceutical industry. This will require minimizing the conflict which currently exists between the gatherers and traditional healers and among members of the traditional healers association. This is a very difficult task but one which is necessary for improving the effectiveness of the traditional medicines marketing system.

4.1.4 The customers of traditional medicines and medicinal plants and herbs

The customers for Marshall Chemicals include *izinyanga*, muthi shops and pharmacies throughout the country. This suggests that the manufacturers use the formal forward market linkages to get their products onto the market. In particular, the study conducted in Durban showed that the customers are males, look wealthy, (by the way they dress), are old, not concerned with prices and mainly from within town. One could ask if this is not a good description of an *inyanga*?

An important aspect of the above lies in the acceptance of grown medicinal plants by the customers or the users of these medicines. Encouragingly, the gatherers in previous studies supported growing as an effective method to ensure that the traditional medicinal plants were not wiped out from the forests in Southern Africa (Mander 1996). In fact the growing of traditional medicinal plants as a means of conservation was favoured by a number of gatherers (Mander 1996).

An important reason underpinning acceptance was that potency would not be affected by cultivated medicinal plants. However, it was pointed out that proper harvesting methods and traditional rituals

⁶ The nature of the product items in the different product lines carried by Marshall Chemicals is available from the author or directly from the company.

were to be observed. This meant that certain parts of trees were debarked, that medicinal plants were harvested at night when they would be at their most potent and that at times the harvester had to be completely naked to preserve the potency of the medicine.

To conclude this section, this study calls for an effective marketing system which will allow various actors in the traditional medicinal sector to come together and establish effective networks to exploit an existing market opportunity. An improved marketing system in this respect would lead to improved supply of raw materials (by growing these), marketing and storage of the traditional medicinal plants, reduced deforestation, and gatherers not required to stay too long in the open street markets. This should result in added benefits to all the participants in the supply chain. Ultimately the gatherers should realize a better quality of life and would employ more people as a result of higher incomes due to higher sales brought about by a wider market acceptance of the final traditional medicinal products. If these medicines do in fact contribute to the health and welfare of the final consumers, then improved availability of the medicines will make an important contribution at that level as well.

4.2 Existing linkages Identified

The following linkages were identified in the traditional medicines sector.

4.2.1 Traditional medicinal plants supplied to pharmaceutical companies and *izinyanga*

The first business linkage identified involved a few gatherers supplying traditional medicinal plants to pharmaceutical companies for processing. A company like Marshall Chemicals buys directly from the gatherers who from time to time come to the factory. In most cases the herbs brought to the company are those in season and as such, the company does not have an option but to buy whatever is brought in large quantities. This is done because of the uncertainty of supply and the seasonality of some of the herbs. Hence, to some extent this gives the suppliers of the traditional medicines some power in the business relationship.

In Gauteng, the suppliers were from surrounding areas and also from as far afield as KwaZulu-Natal (Natal Herbs). Another pharmaceutical company from Durban reported dealing with suppliers for love dust from as far as the Northern Province whilst another reported importing devil's claw from Botswana and Namibia,

As some of these materials look similar, Marshall Chemicals have employed a traditional healer who sits in a "dark office" as the "Purchasing Manager" *cum* "Production Manager" for the traditional medicines line. The traditional healer ascertains whether the plants are the right ones and also determines their quality levels. Apparently in this sector it is very important that certain plants are harvested at the right time to allow for maximum ingredients to be retained. In other cases a tree has to be debarked from both sides to be used for medicine for curing kidney problems. All these facts are checked by the traditional healer.

These examples show that backward linkages in terms of sourcing traditional medicinal herbs, plants, dust etc. are very common in the industry. The only problem is that the source of supply is the forest as opposed to cultivated traditional medicinal plants and herbs.

Of course, it should not be ignored that in the old and also in the current arrangements, the *izinyanga* in urban areas and at times in rural areas, depend on the gatherers to supply them with traditional medicinal plants and herbs which they use for medicine. Or, they will prescribe the medicinal plants to be used by the patients (customers) and these would be purchased from the gatherers on the street muthi markets. This in itself is a very important linkage indeed and is supported by the studies of Mander (1996) in Durban and the follow-up article by Bbenkele (1997) in Durban.

4.2.2 Growing the traditional medicines and herbs

The second business linkage is a potential core activity which would involve getting the gatherers to grow the traditional medicines and herbs in their back gardens or fields and to sell the crop to the manufacturers. In this respect, Pharma Natura reported that it would be very willing to out-source the growing activity to the gatherers for its envisaged expansion in the manufacturing of traditional medicines. The company is even prepared to assist the gatherers in methods of cultivating the medicinal plants. At present even if the company grows about seventy herbs on its farm in Kranskop, it still has to depend on imports for *Scheuder bitter* (used for liver problems), *Ottomisia* (anti-malaria drug) and the famous *Iscador* being researched for curing AIDS.

In both focus group interviews, the traditional healers accepted the growing of plants as something they would be very interested in and an activity which would supplement their incomes. In the market study conducted in Durban, the gatherers were willing to grow the traditional medicinal plants to ensure a continued source of supply (Mander 1996).

It should be pointed out that this linkage (out-sourcing of growing and gathering) is an important one and should be seen as supportive of the first one as the indigenous plants are becoming extinct. To continuously depend on the forests for the supply of traditional medicinal plants and herbs would be destructive to the entire marketing system and this is the direction of things in this sector at present. Growing of the traditional medicinal plants and herbs is vital.

Examples can be given of such schemes/initiatives being used by farmers in Switzerland. After a spell of bad prices, Swiss farmers started diversifying into specialist crops, in particular the production of herbs and medicinal plants in mountain areas. With the help of cooperatives and a marketing board a market opportunity was exploited by these farmers.

4.2.3 Traditional medicines as a non-traditional export product

The third type of business linkage identified involved the supplying of medicinal plants and herbs in the form of roots, leaves and barks to export markets for further processing as raw materials or finished products for the pharmaceutical industry. In one case, *Cape aloes* (used as a laxative) are grown and picked from the forests in the Cape Province, exported to Europe for processing and bought for use as raw materials by the pharmaceutical companies in South Africa.

The reason for this circuitous route is to meet the quality standard requirements imposed by the South African Medical Control Council, which dictate that suppliers of raw materials used for registered medicines be approved by the Council. However, if the medicine is not to be registered, this requirement does not apply.

Again, companies like Adcock are also willing to assist gatherers to grow medicinal plants, buying these from the growers and semi-processing them locally for the European and USA export markets. It is believed that the demand for these seems to be very high due to the shift to alternative medicines in these countries. This was reported to be a "guarded" activity in Cape Town and Bloemfontein, where small-scale farmers are assisted to grow the medicinal plants solely for the export market. This business linkage has the potential of opening up tremendous export opportunities for the industry which could be driven primarily by the gatherers of traditional medicinal plants.

The vast market potential in the USA is widely exposed by Brevoort (1996) in his study of the medicinal herb and plant market in USA. In his study he identifies the types of medicinal plants that are most popular and the top sellers in US commerce.

4.2.4 Forward market linkages

The last type of business linkage which was discovered involved the use of a black businessman playing the role of a middleman selling traditional medicines from the manufacturing companies. It seems that the pharmaceutical companies producing traditional medicines have a problem of getting their products to consumers and for these to be readily accepted on the market.

This linkage was used by Impilo Drug Company in Isithebe. The staff at Impilo described this businessman as having made a lot of money from the business linkage. The method he uses is to buy final traditional medicines from the company and hold sales meetings throughout the country in black communities where powerful sales speeches are made on the efficacy of certain traditional medicines. This approach has worked wonders and both parties are very happy with the business linkage.

In other companies like GM Pharmaceuticals, which has a wide range of *muthi* love medicines, the company reaches the market directly by owning an adult shop situated next to the manufacturing company. Another company uses the Indian-owned *muthi* shops to sell its medicines.

The two focus group interviews revealed that retailing is another area in which the traditional healers could be involved, that is, owning the *muthi* shops to stock products from the manufacturing companies, selling these to other traditional healers and directly to the patients. This was seen as an activity which would be very important and could support the efforts of the Indian retailers who in some cases are not well versed in the traditional *muthi* they sell. This suggestion leads to more blurring of roles and tends to make the traditional healers (*izinyanga*) the only able actors in the sector. The marketing system being proposed in this study respects specialization of roles and a search for equitable participation by a variety of different actors⁷.

5. DISCUSSION OF RESULTS

⁷ It should be pointed out that if there is any indication that the traditional healers also want to gather the traditional medicinal plants and herbs, this is done only by a few and due to changes brought about by commercial reasons, i.e., to reduce costs wherever possible for them to survive. Otherwise, in the old order their status did not permit them to take such low tasks as gatherers.

5.1 The driving force behind the business linkages

For all four types of business linkages discussed above, economic motives for both parties would seem to be the main driving force. Put in other words, both parties expect to be better off financially within any particular linkage activity. Paternalistic types of linkages were not common in this sector as the "marriage of players" between the small suppliers and the big buyers is usually very delicate due to the sacredness of the traditional medicines and the fears of exploitation of this knowledge by the Western medical practitioners⁸. Hence, unless the benefits are very clear, business linkages will not be established..

Further, as has been pointed out above, a clear separation of functions is very important to ensure that all the parties benefit. Fears that the traditional healers will emerge as more dominant are unwarranted and rather unrealistic as they cannot perform all tasks. To expect the traditional healers to spend weeks in the bush gathering medicinal plants and losing out on consultation fees of R100-00 per patient seems unreasonable given the commercial reasons which are driving the activities/roles in the traditional medicines sector.

It would seem appropriate to indicate that if gatherers are to benefit in this sector, deliberate attempts ought to be made to target them as beneficiaries to benefit from the transfer of traditional medicinal plant and herb cultivation technology. It is believed that such an approach would expand the market opportunities for the gatherers to actively participate in the monetary economy, thereby contributing more significantly to employment generation and ultimately economic development.

5.2. Constraints on the potential of the business linkages for contributing to economic development

A number of problems which could limit the economic impact of the business linkages discussed in Section 4 are outlined as follows:

5.2.1. Regulatory requirements from the Medical Control Council

Under Act 102 (1965), the Medical Control Council (MCC) is mandated to ensure that any medicine put on the market passes the safety, efficacy, quality (SEQUA) test and that no misleading claims are made. Shalala in his paper concludes that "... It is evident that the strict requirements for registration of allopathic (orthodox/western) medicines cannot at present apply to the traditional medicines. Findings clearly demonstrate that requirements cannot be met" (Shalala 1996). He further points out that even if other requirements could be relaxed, safety should not be compromised.

Cases of problems arising as a result of the MCC regulatory requirements are common among the pharmaceutical companies producing traditional medicines. The most common one involves false claims made for the traditional medicines. For example, MCC insist that a blood mixture should not claim to cleanse the blood as it is a mere laxative and should be marketed as such. Usually this has

⁸ 'Western medical practitioners' is a widely used concept which includes pharmacists, medical doctors, Medical Research Councils etc. It should not be myopically used to include only pharmaceutical companies as there are many potential 'exploiters'.

been regarded as "protection of the big pharmaceutical companies" from the small companies which are active in the lucrative traditional medicine sector. A lot of close contact and massive education will be required to resolve this issue.

If the members of the supply chain which link directly with the gatherers are constrained to operate, this would have a direct and negative impact on the ease with which the gatherers can enter the mainstream of economic activities and contribute significantly to the economic development process. Hence, the ease with which the pharmaceutical companies can produce traditional medicines will affect the benefit which would be realised by the gatherers.

Additionally, even if regulatory requirements might not be required for the effectiveness of the linkages between the traditional healers and the gatherers, the two parties seem to need each other and should be seen as being in a dyadic relationship. This simply means that each party depends on the other to attain goals. For this relationship to exist, writers in business-to-business markets suggest that confidence and mutual trust have to exist between the parties involved in the relationship. Without this very simple fundamental, confidence will be eroded and lack of trust will be the order of the day, and this will lead to problems in the traditional medicine supply chain.

5.2.2. Intellectual property rights issue

The traditional healers believe that their profession is a call from the ancestors to preserve the life of people and that the knowledge they have should be protected as much as possible from Western medical practitioners. This problem makes the traditional healers withhold information.

Additionally, the gatherers of traditional medicinal plants and herbs feel that they cannot pass on their knowledge to anybody for fear of being exploited as they fear that whatever has been passed on to them by the 'masters' (*izinyanga* and *izangoma*) might be exploited. Brush and Stabinsky (1996) suggest that traditional medicine knowledge is some form of intellectual property and monetary compensation for utilization of such resources could provide indigenous people with an equitable reward for sharing it.

A number of initiatives are being worked on to solve this problem by the Ministry of Health. A listing method using the Australian Therapeutic Goods Administration (TGA) is being adapted to establish a national reference centre for traditional medicines which among other things will develop a national database of indigenous plants that have been screened for efficacy and toxicity.

In other cases the Medical Research Council has funded research initiatives at the University of Cape Town to test the plants supplied to them by the traditional healers from all over the country. This initiative is supposed to share the royalties on a 50-50 basis with the traditional healers who supplied the information. These funds will be paid into a trust which the traditional healers will administer. Whether this approach will reduce the suspicions held by the traditional healers still remains to be seen.

The South African Traditional Medicines Research Group is also in the process of drawing up a draft agreement that will protect the intellectual rights of the providers of the plant information as well as their own. This is intended to provide legal protection for people who are vulnerable to possible

exploitation and to dispel the fear of being swallowed by the Western medical system. It is assumed that these medicines will be registered with the Complementary Medicine Committee.

These approaches are very good but they do not aim at developing trust at the grassroots level of the parties involved in the business linkages. The Medical Research Council and the South African Traditional Medicines Research Group, no matter what they do, might fail to gain the trust of the traditional healers, simply because this sector is very sensitive and needs better confidence building approaches than simplistic "orange juice-sandwich" or "hotel lunch" boardroom agreements.

This issue is still very new in South Africa and needs developing. However, in as much as intellectual property rights are important, the government has to develop suitable institutions and policies, governing local communities to receive the full benefits from the traditional knowledge they have (Bhat, 1996).

5.2.3 Expectations of the traditional healers and gatherers from the pharmaceutical companies

For the business linkages to work, the gatherers and traditional healers expect the pharmaceutical companies to provide a number of services to support the anticipated linkages. These expectations are as follow: firstly the pharmaceutical companies should provide adequate laboratories to test the medicinal plants. Secondly, they should have adequate storage facilities to conserve the chemical properties of the harvested traditional medicinal plants and herbs. And lastly, they should have sufficient capacity to buy the medicinal plants and herbs for processing and be able to distribute these to the ultimate markets.

The question to be posed here is whether the pharmaceutical companies have the required infrastructure or whether they will be prepared to invest in such to support the business linkages with the gatherers. One could suggest that there should be some economic benefit seen by the pharmaceutical companies for them to support these linkages. If these are not apparent, government could possibly broaden the concept of black empowerment to include the companies which are actively involved in out-sourcing to historically underprivileged companies.

However, an encouraging point mentioned by all the pharmaceutical companies is that the traditional medicines sector is very lucrative to the extent that some companies are prepared to relocate to nearby countries in the Southern African Development Community to avoid MCC regulations and sell traditional medicines back into South Africa. Clearly, in such a scenario, South Africa would lose in terms of employment generation. Is this a desirable outcome, one would ask?

6. NECESSARY INSTITUTIONAL ARRANGEMENTS TO PROMOTE GOOD BUSINESS LINKAGES (POLICY IMPLICATIONS)

For the business linkages to be effectively implemented, it is vital that a number of issues are given some serious consideration. These issues revolve around the roles to be assumed by the various members in the marketing system. These are discussed as roles of the linkage promotion agencies, training institutions, pharmaceutical companies, and government.

For an efficient marketing system to be put in place which empowers the gatherers of the traditional medicinal plants, the following institutions are needed for efficiency.

6.1 A unified group of gatherers and traditional healers

The traditional healers and the gatherers in the country need to come together to form a national association to bring together the concerns of the members of the association. Encouragingly, since the time of the field studies, the representatives of the nine provinces in the country met and drew up a declaration to bring together all the regional organizations under one umbrella organization, the South African National Council for Traditional Medical Practitioners. This body should be broad enough to include the various associations of gatherers. This is important because no one group can effectively do everything in this sector. Each group of actors should be represented and a clear understanding of roles agreed on. This is the only way some order could come in this sector where *izinyanga* are turning on each other let alone the gatherers.

The formation of this apex organization should persuade the government to pass the legislation to fully recognize the contribution of traditional practitioners, as enshrined in the National Drug Policy of the Ministry of Health. This common voice is very vital for the government to take on board the valuable contributions from the sector. The government should be advised of the experiences in countries like Kenya where both traditional and modern medicines are considered to be important and continue to exist side by side to make health care available to a majority of people (Kavehed & Odhult, 1997).

In terms of the envisaged marketing system, the gatherers will be targeted as important players in the transfer of technology of growing traditional medicinal plants and herbs. It is hoped that a large number of gatherers and small-scale farmers see growing of the traditional medicinal plants as a viable income generating alternative. This is vital to ensure that the economic benefits spread to many people in the rural communities.

6.2 Land for growing traditional medicines

The underpinning of the business linkages mentioned above lies in the ability of the government to designate some land to the growers of traditional medicinal plants and herbs. The size of the allocated land should ensure that enough raw materials will be provided by involving a larger number of growers other than the traditional healers. This condition is very important for the economic benefits to spread to a wider section of the survivalists in the rural communities.

A submission has been made to government, without going through the structures which the government has created within the MCC to support the traditional medicines sector. The acceptance of these submissions by government will to some extent depend on the extent to which the appropriate

directorates are involved. There is a need for assisting the association of traditional healers regarding proper ways of dialoguing with government.

6.3 Roles of different institutions in the transfer of technology in the growing of plants

A great deal of interest currently exists among ethno-botanists in cultivation of medicinal plants. The work of Prof. Van Staden in the Department of Botany at the University of Natal is worth noting. His research efforts are mainly aimed at developing methods of cultivating the medicinal plants and passing on this technology to small-scale farmers. Alongside such academic interests, a number of companies like Pharma Natura and organizations like the National Parks Board are very interested in transferring the growing technology to traditional healers etc. Pharma Natura point out that the growing of the traditional medicinal plants is not as difficult as people make it out to be and the example of the Swiss farmers support this.

6.4 The role of the pharmaceutical companies

As pointed out above, the pharmaceutical companies producing traditional medicine will be expected to provide adequate laboratories for testing the efficacy of medicines and assisting the traditional healers to develop new medicines. In addition to this they should have adequate storage facilities to preserve the harvested traditional medicinal plants. Lastly, their production capacities will have to expand so that the popular medicines required by the traditional healers and the customers are manufactured and put on the market.

For this to take place, a lot of trust has to exist between the companies and the traditional healers for the knowledge of traditional medicines to be provided for product development to take place. This trust will not develop by a mere policy being put in place. It will have to be the result of parties developing friendships and mutual confidence. Without this, suspicions will continue to exist and render any efforts at establishing business linkages worthless as the market for the gatherers would not exist. This linkage is important and should not be confused as an attempt at making traditional healers champions of the business linkages in the traditional medicines sector.

6.5 Roles of the local business support centres

The traditional healers range from being very small business people to very prosperous individuals with sufficient income to own aeroplanes and build airports to match Durban International Airport. Some hand-holding will be called for. Firstly for the small traditional healers, some support in terms of linking them with the pharmaceutical companies will be required. Secondly, business management training will be needed by the traditional healers for them to effectively link with the big buyers as equal partners. Thirdly, assistance in terms of resolving conflicts which might occur in the business linkages with the big buyers will be essential (support of the vulnerable group). Potentially, the local business support centres can provide these services or be in a better position to identify someone to provide the needed service.

6.6 Government policies

Act 101 (1965) has to be amended so that the traditional healers, the *sangomas* and gatherers are recognized as potential contributors in the economic development efforts. The creation of numerous committees by the MCC, such as the National Reference Centre and the Complementary Medicines Committees, are useful initiatives but if their roles are not properly determined, this could lead to problems in getting things to move to desirable levels. The role of government in this respect is to ensure that policies put in place to regulate the traditional medicines are conducive and provide a level playing field for the full potential of the players in the traditional medicines to be unleashed.

7. CONCLUSION

The study has identified existing and potential business linkages in the traditional medicine sector. However, to make these linkages contribute to employment generation, government should support the entrance of the traditional medicine practitioners as important participants. It will also be important for the government to come up with policies which make it easy for the traditional healers to operate.

The suppliers and buyers in the pharmaceutical industry should stop dealing with each other at arm's length and forge ahead for the development of long-term mutually beneficial relationships based on trust. Without this, the interaction environment will be filled with suspicions and as such information exchange will be constrained. Above all, it will be important for each party to meet the expectations of the other parties.

Lastly, with adequate support from the LBSCs in providing the traditional healers with operational leverage, middlemen being active in providing links in the export and the local market, and the educational institutions and other organizations developing new techniques in growing traditional medicinal plants and transferring these to the traditional healers, gatherers and small-scale farmers, there is the potential of getting more people involved and of more income being made by all the players in this sector. (In Durban alone the gatherers generated as much as R1,8 million as income and had a potential of generating 1000 jobs per year). This sector has the potential and what remains to be done is to bring all the efforts of the researchers and government together for things to move. This seems to be a logical direction for the way ahead.

REFERENCES

- Bbenkele, E. 1997. The cultivation of traditional medicines and the improvement of marketing networks as a recommended strategy to reduce the conflict between users and resource managers: An extension of previous studies. In: Petkov, D., McEwan, T., Zondi.S., & de Waal, D. (eds). Proceedings of the ninth annual conference of the South Africa Institute for Management Scientists held at University of Natal, 2-3 June 1997 Pietermaritzburg, pp. 239-247.
- Bhat, M. 1996. Trade related intellectual property rights to biological resources: Socioeconomic implications for developing countries, *Ecological Economics*, (Amsterdam), 19(3): 205-217.
- Brevoort, P., 1996. The US botanical market: An overview. *Herbal Gram*, No. 36: 49-57.
- Brush, S & Stabinsky, D. 1996. Valuing local knowledge: Indigeneous people and intellectual property rights, Washington D.C, Island Press.
- Calloway, 1870. In *Religious systems of AmaZulu, Pietermaritzburg*. In A dictionary of South African English on historical principles. 1996. New York: Oxford University Press.
- Garden, R.J., 1852). Diary. 1851-53. (Killie Campbell, Africana Library, MS 29081) 21st April. In: A ictionary of South African English on historical principles. 1996. New York:Oxford University Press.
- Hammond-Tooke, 1962. Bhaca Society, Cape Town,South Africa. In: A dictionary of South African English on historical principles. 1996. New York: Oxford University Press.
- Kavehed, J. & Odhult, E., 1997. *An ethnobotanical study among the Masai of Loita Hills, Kenya*. Uppsala, Sweden.
- Longmore, L., 1959. *Dispossessed*. London. In: A dictionary of South African English on historical principles.1996. New York: Oxford Press.
- Mander, M.. 1996. The Russell Street and EzimbuziniMuthi Markets - A situation analysis. INR Investigational Report No 143.
- Rasselli, R. & Biorgi, P. de, 1994. Aromatic herbs of the Swiss mountains: Organizational, production and marketing aspects. In *atti Convegno Internazionale: Colvivazione e Miglioramento di piante officinali*, Trento, Italy. 2-3 Giugno.
- Shalala, D., 1996. Medicine use by Pilansburg traditional healers *The Journal of Modern Pharmacy*, Nov/Dec: 20-24.
- Weekly Mail*, 12th May, 1998.